

CLAIMS

1. A static but movable device comprising:

- a short-range wireless receiver;
- 5 - a location-data processing arrangement for deriving an estimate of the current location of the device on the basis of location data received by the short-range receiver;
- a move detection arrangement for detecting indications that the device at least may have been moved, and
- 10 - a location-validity supervisor for determining, following detection of one or more indications by the move detection arrangement, whether the current location estimate is to be treated as still valid.

2. A device according to claim 1, wherein the move detection arrangement comprises an

- 15 arrangement for detecting a said indication in the form of an indication that the device has been powered down and then powered back up.

3. A device according to claim 1, wherein the move detection arrangement comprises an motion detector for detecting a said indication in the form of an indication of physical

- 20 motion of the device.

4. A device according to claim 1, wherein the device includes a network interface for

connecting the device to a LAN, the move detection arrangement comprising an arrangement for detecting a said indication in the form of a change in address of the part of
25 the LAN to which the device is connected via the network interface.

5. A device according to claim 1, wherein the move detection arrangement comprises an arrangement for detecting a said indication in the form of a change in the set of nearby devices from which the subject device can receive transmissions via its short-range

- 30 receiver.

6. A device according to claim 1, wherein the move detection arrangement comprises an arrangement for detecting a said indication in the form of an inconsistency between newly received location data and one or both of the current location estimate and previously-received location data.

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7. A device according to claim 1, wherein the move detection arrangement comprises at least two of the following:

- an arrangement for detecting a said indication in the form of an indication that the device has been powered down and then powered back up;
- 10 - a motion detector for detecting a said indication in the form of an indication of physical motion of the device;
- an arrangement for detecting a said indication in the form of a change in address of the part of the LAN to which the device is connected via a network interface of the device;
- 15 - an arrangement for detecting a said indication in the form of a change in the set of nearby devices from which the subject device can receive transmissions via its short-range receiver;
- an arrangement for detecting a said indication in the form of an inconsistency between newly received location data and one or both of the current location estimate
- 20 and previously-received location data.

8. A device according to claim 1, wherein the location-validity supervisor is operative to determine that the current location estimate is invalid upon detection of one said indication by the move detection arrangement.

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9. A device according to claim 1, wherein the move detection arrangement is operative to detect at least two different types of indications, the location-validity supervisor being operative to determine that the current location estimate is invalid upon detection of a predetermined combination of indications of two or more types by the move detection

30 arrangement.

10. A device according to claim 9, wherein the move detection arrangement comprises both a first detector arrangement for detecting a first said indication in the form of an indication that the device has been powered down and then powered back up, and a second detector arrangement for detecting a second said indication constituted by a change in the
5 set of nearby devices from which the subject device can receive transmissions via its short-range receiver; the location-validity supervisor being responsive to the detection of a said first indication to query the second detector arrangement as to whether said second indication is present, the location-validity supervisor determining the current location estimate to be invalid when both said first and second indications are present.

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11. A device according to claim 9, wherein the move detection arrangement comprises both a first detector arrangement for detecting a first said indication in the form of an indication that the device has physically been subject to motion, and a second detector arrangement for detecting a second said indication constituted by a change in the set of
15 nearby devices from which the subject device can receive transmissions via its short-range receiver; the location-validity supervisor being responsive to the detection of a said first indication to query the second detector arrangement as to whether said second indication is present, the location-validity supervisor determining the current location estimate to be invalid when both said first and second indications are present.

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12. A device according to claim 1, wherein the location-validity supervisor is operative to determine that the current location estimate is invalid upon detection of multiple occurrences of one type of indication.

- 25 13. A device according to claim 12, wherein the move detection arrangement comprises a consistency-check arrangement for detecting a said indication in the form of an inconsistency between newly received location data and one or both of the current location estimate and previously-received location data, the location-validity supervisor being operative to determine that the current location estimate is invalid upon detection of
30 multiple occurrences of a said indication by the consistency-check arrangement.

14. A method of providing a validity-checked location estimate for a static, but movable, device, the method comprising the steps of:

- (a) - deriving an estimate of the current location of the device on the basis of location data received by a short-range receiver of the device;
- 5 (b) - detecting indications that the device at least may have been moved, and
- (c) - determining, following detection of one or more indications by the move detection arrangement, whether the current location estimate is to be treated as still valid.

15. A method according to claim 14, wherein step (b) involves detecting at least one of the

10 following types of indication:

- an indication that the device has been powered down and then powered back up;
- an indication of physical motion of the device;
- an indication in the form of a change in address of the part of the LAN to which the device is connected via a network interface of the device;
- 15 - an indication in the form of a change in the set of nearby devices from which the subject device can receive transmissions via its short-range receiver;
- an indication in the form of an inconsistency between newly received location data and one or both of the current location estimate and previously-received location data.

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16. A static but movable device comprising location means for receiving location data passed to it from nearby devices and for deriving a best estimate of its own location from the received location data, and watch means for watching for an indication that the device has been, or may have been moved, and for causing the location means to discard its 25 previously-obtained location data and location estimate.

17. A device according to claim 16, wherein the watch means comprises at least one of:

- means for detecting power down / power up of the device;
- means for detecting a significant discrepancy between the most recently received 30 location data and previously received location data;
- a displacement sensor.